REMARKS

Upon entry of the foregoing amendments, claims 21-23, 26, and 28-38 are under consideration. Claims 15-19 were canceled herein, without prejudice or disclaimer, as directed to non-elected inventions. In addition, claim 25 was cancelled herein, and claims 24 and 27 were previously cancelled. Applicant reserves the right to prosecute the cancelled subject matter, as well as the originally presented claims, in continuing applications. Support for the amendment to claims 28, 33 and 33 is found in the specification at least at page 8, lines 3-6. Accordingly, no new matter is added.

A. TIMELINESS OF FILING

Applicants contend that the Request for Continued Examiner in conjunction with this paper constitute a timely filing under 37 C.F.R. §1.114 for the reasons set forth below.

1. On April 11, 2003, Applicants' representatives filed, via facsimile, a timely response to the November 12, 2002 Office Action, along with a Petition for a Two-Month Extension of Time, a Notice of Appeal and authorization to charge Deposit Account 50-0311 for the appropriate fees under 37 C.F.R. §§1.136(a), 1.17(b). At 2:41 pm on April 11, 2003, Applicants' representatives received an "Auto-Reply Facsimile Transmission", which indicated that all pages of Applicants' April 11, 2003 filing had been received by the U.S.P.T.O.

1.1 A copy of the Certificate of Transmission Under 37 C.F.R. 1.8 (1 pg.), listing all documents filed by Applicants' representative, via facsimile, on April 11, 2003, is attached hereto as Exhibit A.

1.2 A copy of the Fax Cover Sheet (1 pg.) sent via facsimile by Applicant's representatives on April 11, 2003, including a Transmission Report ("TX Report") indicating successful transmission of the items listed above in ¶1.1. is attached hereto as Exhibit B.

1.3 A copy of the Auto-Reply Facsimile Transmission from the United States Patent and Trademark Office (1 pg.), indicating receipt of 39 pages from Fax Sender at 617 542 2241 on April 11, 2003 at 2:41:16 pm is attached hereto as Exhibit C.

2. On June 25, 2003, Applicants received an erroneous Notice of Abandonment for failure to timely file a proper reply to the November 12, 2002 Office Action.

2.1 A copy of the June 25, 2003 Notice of Abandonment stating that Applicants failed to timely file a proper reply to the Office Letter mailed November 12, 2002 (2 pgs.) is attached hereto as Exhibit D.

3. On July 1, 2003, Applicants' representatives promptly filed, via Express Mail, a Petition Under 37 C.F.R. § 1.181 for Withdrawal of the Examiner's Holding of Abandonment.

3.1 A copy of the Petition Under 37 C.F.R. §1.181, filed July 1, 2003, is attached hereto as Exhibit E.

4. On November 12, 2003, Applicants' representatives received a Communication mailed on November 10, 2003 by Legal Instrument Examiner Goiga N. Duckett of the U.S.P.T.O. This communication indicated that "the holding of abandonment mailed on June 25, 2003 [had] been withdrawn", "the copy or original response filed on April 11, 2003 [had] been made of record in the file" and "the application [had] been returned to pending status." Applicants received this Communication after the statutory period for responding to the November 12, 2002 final Office Action had already lapsed, and after the time period for filing an Appeal Brief under 37 C.F.R. §§1.191-192 had also lapsed.

4.1 A copy of the November 10, 2003 Communication is attached hereto as Exhibit F.

5. On November 17, 2003, Applicants' representatives received an Advisory Action mailed on November 13, 2003 by Examiner Ewoldt. The Examiner, however, failed to indicate the appropriate PERIOD FOR REPLY in this Advisory Action. The Advisory Action indicated that the proposed amendments filed on April 11, 2003 would not be entered because "the proposed amendment to Claims 28, 33 and 38 introduces new limitation ("human") requiring new search and consideration." The Advisory Action also indicated that a Notice of Appeal was filed on April 11, 2003, and that "Appellant's Brief must be filed within the time period set forth in 37 C.F.R. §1.192(a), or any extension thereof (37 C.F.R. §1.191(d)), to avoid dismissal of the appeal." This Advisory Action was mailed after the statutory period for responding to the November 12, 2002 final Office Action had already lapsed, and after the time period for filing an Appeal Brief under 37 C.F.R. §§1.191-192 had also lapsed.

5.1 A copy of the November 13, 2003 Advisory Action is attached hereto as Exhibit G.

6. Applicants believe that the Request for Continued Examination and this submission constitute a timely filing under 37 C.F.R. §1.114. On November 10, 2003, one of Applicants' representatives, Jennifer Karnakis (Reg. No. 53,097) spoke with Supervisory Patent Examiner Christina Chan regarding the instant application. Examiner Chan explained that she had shown the November 10, 2003 Communication from Legal Instrument Examiner Goiga N. Duckett to Mr. Bill Dixon, who typically handles Petitions Under 37 C.F.R. §1.181 for Withdrawal of the Examiner's Holding of Abandonment. According to Examiner Chan, Mr. Dixon indicated that Applicants would have two months from the mailing date of the November 10, 2003 Communication to file an Appeal Brief in this case. Thus, Applicants believe that the period for responding to the November 17, 2003 Advisory Action, as well as the period for filing an Appeal Brief, expires on January 10, 2004 (*i.e.*, two months from the mailing date of the November 10, 2003 Communication from Legal Instrument Examiner Goiga N. Duckett).

7. Accordingly, Applicants contend that this submission constitutes a timely filing under 37 C.F.R. §1.114 and request continued examination of U.S. Application No. 09/194,396. Applicants believe that no fees are due in connection with this timely filing. However, the Commissioner is authorized to charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 23254-501.

B. RESPONSE TO NOVEMBER 12, 2002 FINAL OFFICE ACTION

Applicants note that the following arguments have been set forth under headings that correspond to the issues raised in the November 12, 2002 final Office Action.

Restriction Requirement

In response to the Restriction Requirement dated November 20, 2001, Applicants elect the invention of Group I (claims 21-26 and 28), drawn to a dimerized fusion protein, without traverse.

§ 112, First Paragraph Rejection: Written Descripti n

1. The Examiner has rejected claims 25-26, and 28 under 35 U.S.C. § 112 first paragraph for lack of written description. The Examiner asserts that the specification and the claims as originally filed does not provide support for the invention as now claimed. The Examiner states that claim 25 is still pending. In response, Applicants note that claim 25 has been canceled herein. Therefore, this rejection is moot as it pertains to claim 25. The remaining rejections are addressed as follows.

1A. "more Galα1, 3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1"

The Examiner states that "Applicant argues that the experiment disclosed on page 12 of the specification supports the claim to the fusion protein of claim 21, wherein the first polypeptide comprises more Galα1, 3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1." (See Final Office Action, page 2). In response, Applicants assert that pending claim 21 does not recite the phrase "more Galα1, 3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1." Applicants would like to note to the Examiner that claim 26, which depends from claim 21, does not recite this phrase. Applicants further note that claim 28, which depends from claim 21, as amended herein recites in part, "wherein the first polypeptide comprises more Galα1, 3Gal epitopes than the human wild-type P-selectin glycoprotein ligand-1 polypeptide." Applicants address this rejection as it applies to claim 28. The specification discloses at, *e.g.*, page 11, lines 12-37 and Figure 1, that fusion proteins containing the human PSGL-1 polypeptide that are glycosylated by an α1,3 galactosyltransferase contain more Galα1, 3Gal epitopes than the human wild-type P-selectin glycoprotein ligand-1 polypeptide, as shown by Western blotting with the *Bandereria simplicifolia* isolectin B_4 (See Figure 1, right column). Applicants have amended claim 28 herein to recite the phrase "wherein the first polypeptide comprises more Galα1, 3Gal epitopes than the human wild-type P-selectin glycoprotein ligand-1 polypeptide." Applicants assert that the recitation of the phrase "the human wild-type P-selectin glycoprotein ligand-1 polypeptide" is a single species, and thus, that one skilled in the art could readily determine if the claimed polypeptide falls within its scope. Thus, claim 28 as amended herein is fully supported by the as filed specification. Therefore, this rejection should be withdrawn.

2. The Examiner has rejected claims 21-23, 25-26, and 28-38 under 35 U.S.C. § 112 first paragraph for lack of written description. The Examiner asserts that the specification and the claims as originally filed does not provide support for the invention as now claimed. Claim 25 has been canceled herein. Therefore, this rejection is moot as it pertains to claim 25. The remaining rejections are addressed as follows.

2A. "an immunoglobulin heavy chain polypeptide"

Regarding claims 21, 25, 26, and 29, the Examiner states that the specification and the claims as originally filed do not provide support for the phrase "an immunoglobulin heavy chain polypeptide." Applicants have canceled claim 25. Thus, this rejection is moot as it applies to this claim. Applicants traverse this assertion to the extent it applies to claims 21, 26 and 29. Applicants assert that the specification at page 8, lines 6-10, recites that "[t]he mucin/immunoglobulin expression plasmid was constructed by fusing the PCT-amplified cDNA of the extracellular part of PSGL-1 in frame via a BamHI site, to the Fc part (hinge, CH2 and CH3) of mouse IgG_{2b} carried as an expression cassette in CDM7." It is known to one of ordinary skill in the art that the Fc (fragment crystallizable) region of an IgG inherently contains an immunoglobulin heavy chain polypeptide, particularly since the immunoglobulin light chain polypeptide is not present in the Fc region, as it is contained within the F(ab) region of an IgG. (See, *e.g.*, Figure 1, Chapter 9, pages 209-233 of Fundamental Immunology, 2nd Edition, W.E. Paul, *ed.*, Raven Press, NY; courtesy copy enclosed).

A structure or process not explicitly described may meet the conveyance standard if it is "inherent" in what is described. See Standard Oil Co. v. Montedison, S.p.A., 494 F.Supp 370 (D. DE 1980) ("[p]atent entitlement is based on scientific skill and diligence and not on the ability to manipulate the English language, . . . Legal equivalence, or inherency, may be established either by the direct meaning of the language or by inferences drawn from the terms of the initial disclosure." In the pending application, one skilled in the art would reasonably conclude that Applicant's disclosure of the Fc region of an IgG inherently discloses an immunoglobulin heavy chain polypeptide, and, therefore, that the Applicants had possession of the claimed invention at the time the application was filed. Thus, pending claims 21, 26, and 29 are fully supported by the as filed specification.

2B. "the extracellular portion of a P-selectin glycoprotein ligand-1"

Regarding claim 29, The Examiner states that the specification and the claims as originally filed do not provide support for the phrase "extracellular portion of a P-selectin glycoprotein ligand-1." Applicants traverse. The specification at page 8, lines 6-8, recites that "[t]he mucin/immunoglobulin expression plasmid was constructed by fusing the PCR-amplified cDNA of the extracellular part of PSGL-1 in frame via a BamHI site." (Emphasis added). The plain meaning of the term "part" is "a division, portion or segment of a whole." (Webster's II New Riverside Dictionary, Revised, 1996). "Patent entitlement is based on scientific skill and diligence and not on the ability to manipulate English synonyms." Standard Oil Co. v. Montedison, S.p.A. 494 F. Supp. 370, 384 (D. Del. 1980). Therefore, the phrase "extracellular portion of a P-selectin glycoprotein ligand-1" as used in claim 29 is fully supported by the as filed specification.

2C. "more Galα1, 3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1"

Regarding claims 33 and 38, The Examiner states that the specification and the claims as originally filed do not provide support for the phrase "comprises more Galα1, 3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1." In response, Applicants note that claims 33 and 38 have been amended herein to recite "comprises more Galα1, 3Gal epitopes than the human wild-type P-selectin glycoprotein ligand-1 polypeptide." (Emphasis added). As noted above, the specification discloses at, *e.g.*, page 11, lines 12-37 and Figure 1, that fusion proteins containing the human PSGL-1 polypeptide that are glycosylated by an α1,3 galactosyltransferase contain more Galα1, 3Gal epitopes than the human wild-type P-selectin glycoprotein ligand-1 polypeptide, as shown by Western blotting with the *Bandereria simplicifolia* isolectin B_4. Therefore, claims 33 and 38 as amended herein are fully supported by the as filed specification.

2D. "comprises a part of a P-selectin glycoprotein ligand-1 that mediates binding to selectin"

Regarding claim 34, The Examiner states that the specification and the claims as originally filed do not provide support for the phrase "comprises a part of a P-selectin glycoprotein ligand-1 that mediates binding to selectin." In response, Applicants assert that claim 34 is fully supported; the specification at page 4, lines 34-36, recites "in a preferred

embodiment, the antigenic fusion protein according to the invention further comprises a part, which mediates binding to selectin, such as P-selectin." The specification further discloses at page 5, lines 6-9 that "the part that mediates binding to selectin is the P-selectin glycoprotein ligand-1 (PSGL-1) or an essential part thereof." Therefore, pending claim 34 is fully supported by the as filed specification. Applicants request that these rejections be withdrawn.

CONCLUSION

Applicants believe that the claims, as amended, are in condition for allowance. If the Examiner has any questions, the Examiner is invited to contact the undersigned by telephone.

Respectfully submitted,

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